Commonwealth of Virginia

Information Technology Resource Management Standard

TECHNOLOGY MANAGEMENT GLOSSARY

Virginia Information Technologies Agency (VITA)

Preface

Publication Designation

COV ITRM Standard GOV2003-02.3

Subject

Technology Management Glossary

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COV ITRM Standard GOV2003-02.2
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Scheduled VITA Review

One (1) year from the effective date, then every two years thereafter.

Authority

Code of Virginia, §2.2-2007

(Powers and duties of the CIO)

Code of Virginia, §2.2-2010

(Additional powers of VITA)

Code of Virginia, §2.2-2017

(Powers and duties of the VITA Division of Project Management)

Code of Virginia, §2.2-2014

(Submission of information technology plans by state Agencies and public institutions of higher education; designation of technology resource.)

Code of Virginia, §2.2-2015

(Authority of CIO to modify or suspend major information technology projects; project termination)

Code of Virginia, §2.2-2018; §2.2-2019; §2.2-2020; §2.2-2021

(Project Planning approval; Project Development Approval; Procurement approval for major information technology projects; Project oversight)

Code of Virginia, §2.2-2457; §2.2-2458

(Information Technology Investment Board; membership; terms; quorum; compensation; staff; Powers and duties of the Board)

Code of Virginia § 2.2-2651

(Council on Technology Services; purpose; membership; chairman)

Scope

This Standard is applicable to all Executive Branch state Agencies and institutions of higher education (hereinafter collectively referred to as "Agencies") that are responsible for the management, development, purchase and use of information technology investments in the Commonwealth of Virginia. This Standard does not apply to research projects, research initiatives or instructional programs at public institutions of higher education. Local government entities are encouraged to consider the implications of this standard for their work.

Purpose

To facilitate the development, improvement, and standardization of technology management throughout the Commonwealth of Virginia by the use of a common set of terms. This standard establishes a comprehensive and uniform set of definitions and acronyms for commonly used Commonwealth Technology Management terms.

General Responsibilities

(Italics indicate Code of Virginia requirements)

The Information Technology Investment Board (Board)

The Information Technology Investment Board is assigned the following general technology management responsibilities:

- *Approve strategies, standards, and priorities recommended by the Chief Information Officer for the use of information technology for state Agencies in the executive branch of state government;*
- *Approve criteria for the review and approval of the planning, scheduling and tracking of major information technology projects as defined in § 2.2-2006;*
- *Appoint the Chief Information Officer as the chief administrative officer of the Board to oversee the operation of VITA pursuant to § 2.2-2005;*
- *Approve statewide technical and data standards for information technology and related systems;*
- *Approve statewide information technology architecture and related set of system standards;*
- *Adopt resolutions or regulations conferring upon the Chief Information Officer all such powers, authorities and duties as the Board deems necessary or proper to carry out the purposes of Chapter 20 of Title 2.2; and*

Chief Information Officer (CIO)

The Chief Information Officer is assigned the following general technology management responsibilities:

- *Direct the formulation and promulgation of policies, guidelines, standards, and specifications for the purchase, development, and maintenance of information technology for state Agencies, including, but not limited to, those (i) required to support state and local government exchange, acquisition, storage, use, sharing, and distribution of geographic or base map data and related technologies, (ii) concerned with the development of electronic transactions including the use of electronic signatures as provided in § 59.1-496, and (iii) necessary to support a unified approach to information technology across the totality of state government, thereby assuring that the citizens and businesses of the Commonwealth receive the greatest possible security, value, and convenience from investments made in technology;*
- *Direct the development of policies and procedures, in consultation with the Department of Planning and Budget, that are integrated into the Commonwealth's strategic planning and performance budgeting processes, and that state Agencies and public institutions of higher education shall follow in developing information technology plans and technology-related budget requests. Such policies and procedures shall require consideration of the contribution of current and proposed technology expenditures to the support of Agency and institution priority functional activities, as well as current and future operating expenses, and shall be utilized by all state Agencies and public institutions of higher education in preparing budget requests;*
- *Direct the development of policies and procedures for the effective management of information technology investments throughout their entire life-cycles, including, but not limited to, project definition, procurement, development, implementation, operation, performance evaluation, and enhancement or retirement. Such policies and procedures shall include, at a minimum, the periodic review by the CIO of Agency and public institution of higher education information technology projects estimated to cost $1 million or more or deemed to be mission-critical or of statewide application by the CIO;*

Virginia Information Technologies Agency (VITA)

The Virginia Information Technologies Agency is assigned the following general technology management responsibilities:

- *Prescribe regulations necessary or incidental to the performance of duties or execution of powers conferred under the Code of Virginia, §2.2-2010;*
- *Develop and adopt policies, standards, and guidelines for managing information technology by state Agencies and institutions;*
- *Develop and adopt policies, standards, and guidelines for the procurement of information technology and telecommunications goods and services of every description for state Agencies;*
- *Direct the establishment of statewide standards for the efficient exchange of electronic information and technology, including infrastructure, between the public and private sectors in the Commonwealth; and*
- *Develop statewide technical and data standards for information technology and related systems to promote efficiency and uniformity.*

The Project Management Division (PMD) of VITA

The Division of Project Management is assigned the following general technology management responsibilities:

- *Assist the CIO in the development and implementation of a project management methodology to be used in the development of and implementation of information technology projects in accordance with this article;*
- *Provide ongoing assistance and support to state Agencies and public institutions of higher education in the development of information technology projects;*
- *Provide oversight for state Agency information technology projects;*

Executive Branch (Cabinet) Secretaries

Executive Branch (Cabinet) Secretaries are assigned the following general technology management responsibilities:

- Make appropriate recommendations to the CIO regarding COV enterprise technology programs and projects, throughout the program or project life-cycle, which includes program or project initiation, planning, execution, closeout, and operations and support; and
- Review Agency Major IT Projects and make appropriate recommendations to the CIO, throughout the project lifecycle, which includes the project initiation, planning, execution, closeout, and operations and support phases.

Executive Branch State Agencies

State Agencies are assigned the following general technology management responsibilities:

- *The head of each state Agency shall designate an existing employee to be the Agency's information technology resource who shall be responsible for compliance with the procedures, policies, and guidelines established by the CIO;*
- Comply with the policies and standards, and consider guidelines for the management of information technology resources in the Commonwealth;
-

Related COV ITRM Policies, Standards, and Guidelines

- Project Manager Selection and Training Standard (COV ITRM Standard 2003-02.3);
- Project Management Standard(COV ITRM Standard CPM 112-02); and
- Project Management Guideline (ITRM Guideline CPM 110-01).

ITRM Publication Version Control

It is the user's responsibility to ensure they have the latest version of this ITRM publication. Questions should be directed to the Supervisor of the Management Support Office in VITA's Project Management Division (PMD). When revisions of this publication have been approved by the Information Technology Investment Board (ITIB), PMD will notify the Agency Information Technology Resources (AITRs) at all state Agencies and institutions as well as other parties PMD considers to be interested in the change.

This table contains a history of this ITRM publication's revisions.

Version	Date	Purpose of Revision
GOV2003-02.0	April 9, 2002	Base Document
GOV2003-02.1	July 1, 2003	Minor corrections and addition of terms needed to support Commonwealth project and portfolio management.
GOV2003-02.2	July 15, 2005	Updated glossary definitions to conform with the Project Management Body of Knowledge (PMBOK) 3rd Edition. Additional terms supporting Commonwealth project and portfolio management have been added to the glossary.
GOV2003-02.3	February 22, 2008	Minor corrections and addition of terms needed to support Commonwealth project and portfolio management.

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Background

Technology management (TM) is a dynamic field of endeavor; however, commonly used TM terms have come to have consistent meaning through organizations like the Project Management Institute (PMI), who publish the Project Management Body of Knowledge (PMBOK 3RD EDITION), the Software Engineering Institute (SEI), and the Clinger-Cohen Act (CCA). The development, improvement, and standardization of technology management throughout the Commonwealth of Virginia is facilitated by the use of a common set of terms. This glossary is to be used by all agencies and institutions of higher education (herein referred to as agencies) as a common reference for Commonwealth Technology Management (CTM).

Approach

The glossary provides CTM terms, in an alphabetic listing. The definition of each term is based on industry standards and modified to fit the Commonwealth approach to technology management. If a term has multiple meanings, or may be used in multiple ways, more than one definition is provided.

Where appropriate, the primary source of each definition is acknowledged. If the primary source for the definition has identified a commonly accepted acronym, the acronym is also provided in the Glossary. Primary sources include the Project Management Body of Knowledge (PMBOK 3RD EDITION), Software Engineering Institute (SEI), General Accounting Office (GAO), National Aeronautics and Space Administration (NASA), Cambridge International Dictionary of English, Wikipedia, Virginia Department of General Services (DGS), and the Clinger-Cohen Act.

Recommended Changes

Recommended revisions, additions, and deletions to this glossary should be submitted to:

Virginia Information Technologies Agency
Project Management Division
Commonwealth Enterprise Solutions Center
11751 Meadowville Lane
Chester, VA 23836

A

Acceptance Criteria—Those criteria, including performance requirements and essential conditions, which must be met before project deliverables are accepted (PMBOK 3RD EDITION).

Acquisition Process—The process of acquiring personnel/goods/services for new or existing work within the general definitions of contracts requiring an offer and acceptance, consideration, lawful subject matter and competent parties.

Action Item Status—A list of problem issues, including a description, point of contact, and dates of action and resolution.

Action Plan—A plan that describes what needs to be done and when it needs to be completed. Project plans are action plans.

Active Projects—A project portfolio category for either Major IT Projects that have been granted development approval by the ITIB or Non-major IT Projects that have been granted development approval by the CIO.

Activity—An element of work performed during the course of a project. An activity normally has an expected duration, expected cost, and expected resource requirements. Activities are often subdivided into tasks.

Activity Definition—The process of identifying the specific schedule activities that need to be performed to produce the various project deliverables. (PMBOK 3RD EDITION)

Activity Duration—The time in calendar units between the start and finish of a schedule activity. (PMBOK 3RD EDITION)

Activity Duration Estimating—The process of estimating the number of work periods that will be needed to complete individual schedule activities. (PMBOK 3RD EDITION)

Activity Resource Estimating—Determining what resources (people, equipment, and materials) are needed in what quantities to perform project activities. (PMBOK 3RD EDITION)

Actual Cost (AC)—The costs actually incurred and recorded in accomplishing the work performed during a given time period for a schedule activity or work breakdown structure component. (PMBOK 3RD EDITION)

Agency Management—A term that refers to those people who are responsible for the business operations of an agency.

Alignment—The degree of agreement, conformance, and consistency among organizational purpose, vision and values; structures, systems, and processes; and individual skills and behaviors. (GAO)

Alternative Analysis—Breaking down a complex situation for the purpose of generating and evaluating different solutions and approaches.

Analysis—The detailed study and examination of something, in order to discover more about it (from Cambridge International Dictionary of English). Analysis typically includes discovering parts of the item being studied, as well as how they fit together. An example is the study of schedule variances for cause, impact, corrective action, and results.

Application Area—A category of projects that have common components significant in such projects, but are not needed or present in all projects. Application areas are usually defined in terms of either the product (i.e., by similar technologies or production methods) or the type of customer (e.g., internal vs. external, government vs. commercial) or industry sector (i.e., utilities, automotive, aerospace, information technologies). Application areas often overlap. (PMBOK 3RD EDITION)

Approve—To accept as satisfactory. Approval implies that the item approved has the endorsement of the approving entity. The approval may still require confirmation by somebody else, as in levels of approval. In management use, the important distinction is between approved and authorized. See authorization.

Approved for Project Development (APD)—A project portfolio category for projects that have received approval of the project's detailed business case (Project Proposal and Project Charter) from the ITIB. APD authorizes the agency to begin the Project Planning phase of the Commonwealth Project Management lifecycle.

Approved for Project Planning (APP)—A project portfolio category for projects that have received approval of the project's investment business case from the CIO. APP authorizes the agency to expend funds in preparation for Development Approval.

Areas of Responsibility—Used to define the person or organizational entity responsible for specific policy areas, processes, and procedures as identified.

Arrow Diagramming Method (ADM)—A schedule network diagramming technique in which schedule activities are represented by arrows. The tail of the arrow represents the start, and the head represents the finish of the schedule activity. Schedule activities are connected at points called nodes (usually drawn as small circles) to illustrate the sequence in which the schedule activities are expected to be performed. (PMBOK 3RD EDITION)

Asset—Component of a process used to support business activities.

Authorization—The power granted by management to specified individuals allowing them to approve transactions, procedures, or total systems.

Assumptions—Factors that, for planning purposes, are considered to be true, real, or certain without proof or demonstration.

Authorized Work—An effort that has been approved by higher authority and may or may not be defined.

B

Backward Pass—The calculation of late finish dates and late start dates for the uncompleted portions of all schedule activities. Determined by working backwards through the schedule network logic from the project's end date. The end date may be calculated in a forward pass or set by the customer or sponsor. (PMBOK 3RD EDITION)

Bar Chart—A graphic display of schedule-related information. In the typical bar chart, schedule activities or work breakdown structure components are listed down the left side of the chart, dates are shown across the top, and activity durations are shown as date-placed horizontal bars. (PMBOK 3RD EDITION)

Baseline—The approved time phased plan (for a project, a work breakdown structure component, a work package, or a schedule activity), plus or minus approved project scope, cost, schedule, and technical changes. Generally refers to the current baseline, but may refer to the original or some other baseline. Usually used with a modifier (e.g., cost baseline, schedule baseline, performance measurement baseline, technical baseline). (PMBOK 3RD EDITION)

Baselining—Obtaining data on the current process that provides the metrics against which to compare improvements and to use in benchmarking. (GAO)

Benchmark—A measurement or standard that serves as a point of reference from which process performance is measured. (GAO)

Benchmarking—A structured approach for identifying the best practices from industry and government, and comparing and adapting them to the organization's operations. Such an approach is aimed at identifying more efficient and effective processes for achieving intended results, and suggesting ambitious goals for program output, product/service quality, and process improvement. (GAO)

Benefit—A term used to indicate an advantage, profit, or gain attained by an individual or organization. (GAO)

Best Practices—The processes, practices, or systems identified in public and private organizations that performed exceptionally well and are widely recognized as improving an organization's performance and efficiency in specific areas. Successfully identifying and applying best practices can reduce business expenses and improve organizational efficiency. (GAO)

Best Value—The overall combination of quality, price, and various elements of required services that in total are optimal relative to a public body's needs, as predetermined in a solicitation. Best value concepts may be applied when procuring goods and nonprofessional services, but not construction or professional services. The criteria, factors, and basis for the consideration of best value and the process for the consideration of best value shall be as stated in the procurement solicitation (Code of Virginia, § 2.2-4301).

Board—The "Board" means the Information Technology Investment Board (ITIB) created in Code of Virginia, § 2.2-2452.

Budget—When unqualified, refers to an estimate of funds planned to cover a project or specified period.

Budget At Completion (BAC)—The sum of all the budget values established for the work to be performed on a project or a work breakdown structure component or a schedule activity. (PMBOK 3RD EDITION)

Business Impact Analysis—Identifies project constraints, alternatives, and related assumptions as they apply to the initiation phase.

Business Case—A structured proposal for business improvement that functions as a decision package for organizational decision-makers. A business case includes an analysis of business process performance and associated needs or problems, proposed alternative solutions, assumptions, constraints, and a risk-adjusted cost-benefit analysis. (GAO)

Business Owner—The functional stakeholder whose responsibilities are to identify and communicate business needs and knowledge for the project, and insure the business needs are appropriately addressed by the project.

Business Plan—*Changed to* Strategic Business Plan

Business Problem—A question, issue, or situation, pertaining to the business, which needs to be answered or resolved.

Business Process—A collection of related, structured activities--a chain of events--that produce a specific service or product for a particular customer or customers. (GAO)

Business Process Reengineering—In government, a systematic disciplined improvement approach that critically examines, rethinks, and redesigns mission-delivery processes and sub-processes within a process management approach. In a political environment, the approach achieves radical mission performance gains in meeting customer and stakeholder needs and expectations. (GAO)

Business Vision—A description of what senior management wants to achieve with the organization in the future. A business vision usually addresses a medium to long-term period and is expressed in terms of a series of objectives. (GAO)

C

Cabinet Secretary—An officer of the Governor's Cabinet appointed to oversee the operations of a group of functionally related agencies.

Calendar Unit—The smallest unit of time used in scheduling the project. Calendar units are generally in hours, days, or weeks, but can also be in quarter years, months, shifts, are even in minutes. (PMBOK 3RD EDITION)

Capital Asset—Tangible property, including durable goods, equipment, buildings, installations, and land. (CCA)

Change Control—Identifying, documenting, approving or rejecting, and controlling changes to the project baselines. (PMBOK 3RD EDITION)

Change Control Board (CCB)—A formally constituted group of stakeholders responsible for reviewing, evaluating, approving, delaying, or rejecting changes to the project, with all decisions and recommendations being recorded. (PMBOK 3RD EDITION)

Change Management Process—A set of tasks or procedures established to ensure that project performance is measured to the baseline and changes are reviewed, approved, or rejected and the baseline updated.

Chart of Accounts—Any numbering system used to monitor project costs by category (e.g., labor, supplies, and materials). The project chart of accounts is usually based upon corporate chart of accounts of the primary performing organization. (PMBOK 3RD EDITION)

Code of Accounts—Any numbering system used to uniquely identify each component of the work breakdown structure. (PMBOK 3RD EDITION)

Collaboration Opportunity—A common business need that establishes the opportunity for organizations and/or political subdivisions to work together, in a substantive, mutually beneficial relationship, towards a common integrated solution. In preparation for the annual RTIP Report, agency IT investments are evaluated as potential Collaboration Opportunities.

Co-location—An organizational placement strategy where the project team members are physically located close to one another in order to improve communication, working relationships, and productivity. (PMBOK 3RD EDITION)

Common Requirements Vision (CRV)—The document that presents the business case for the Commonwealth EA Initiative and represents the initial step in the evolution of the Enterprise Architecture (EA) process model. The CRV establishes the agreements reached between business and IT leaders regarding: the most significant, influencing trends on the enterprise; the enterprise business strategies that will drive the EA; the information required by the business decision makers

to satisfy the enterprise business strategies; implications for application portfolio development; and the requirements for the technical architecture.

Commonwealth Asset Management—The process of planning, procuring, deploying, operating, maintaining, upgrading, and disposing of assets to achieve maximum return on investment over the life-cycle of the asset, in support of both Commonwealth and agency IT strategic plans.

Commonwealth Project (CP)—A temporary endeavor, undertaken by a Commonwealth executive branch agency (or agencies), to deliver a unique product or service. Commonwealth projects are expected to follow project management best practices and comply with project management requirements identified in the Code of Virginia, Governor's Executive Orders, and COV ITRM policies, standards, and guidelines.

Commonwealth Project Management (CPM)—The application of knowledge, skills, tools, and techniques to meet or exceed stakeholder needs and expectations from a Commonwealth Project.

Commonwealth Technology Management (CTM)—In the Commonwealth of Virginia, it is the application of information technology investment management (ITIM) principles and practices in support of the business activities of state government.

Communications Services—Service that includes telecommunications services, automated data processing services and management information systems that serve the needs of state agencies and institutions. (§2.2-2001 of the Code of Virginia).

Computer Database—A structured collection of data or records residing in a computer.

Concept—An imaginative arrangement of a set of ideas.

Conceptual Project Planning—The process of developing broad-scope project documentation from which the technical requirements, estimates, schedules, control procedures, and effective project management will all flow.

Condition—The key circumstances, situations, etc., that are causing concern, doubt, anxiety, or uncertainty. In a risk statement, the condition phrase is the phrase at the beginning of the statement. (SEI)

Configuration Management (CM)—Configuration Management is a formal discipline that provides project team members and customers with the methods and tools that are used to identify the product developed, establish baselines, control changes to these baselines, record and track status, and audit the product.

Configuration Management System—A subsystem of the overall project management system. It is a collection of formal documented procedures used to apply technical and administrative direction and surveillance to: identify and document the functional and physical characteristics; record and report each change and its implementation status; and support the audit of the products, results or components to verify conformance to requirements. It includes the documentation, tracking

systems and defined approved levels necessary for authorizing and controlling changes. In most application areas, the configuration management system includes the change control system. (PMBOK 3RD EDITION)

Constraint—The state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external to the project that will affect the performance of the project or a process. (PMBOK 3RD EDITION)

Consequence—The possible negative outcomes of the current conditions that are creating uncertainty. In a risk statement, the consequence phrase is the phrase at the end of the statement. (SEI)

Contingency Planning—The development of a management plan that identifies alternative strategies to be used to ensure project success if specified risk events occur.

Contingency Reserve—The amount of funds, budget, or time needed above the estimate to reduce the risk of overruns of project objectives to a level acceptable to the organization. (PMBOK 3RD EDITION)

Contract—When used as a noun in this manual, contract refers to an agreement enforceable by law, between two or more competent parties, to do or not to do something not prohibited by law, for a consideration. A contract is any type of agreement or order for the procurement of goods or services. As a verb, contract has its usual legal sense, signifying the making of an agreement for consideration. (DGS, APSPM)

Contract, Fixed Price—A contract that provides for a firm unit or total price to be established at the time of order placement or contract award. The contractor bears the full risk for profit or loss.

Contract, Fixed Price with Escalation/De-escalation—A fixed price type of contract that provides for the upward and downward revision of the stated contract price upon the occurrence of certain contingencies (such as fluctuations in material costs and labor rates) specifically defined in the contract. (DGS, APSPM)

Contract, Cost-Plus-A-Fixed-Fee—A cost-reimbursement type contract that provides for the payment of a fixed fee to the contractor. The fixed fee, once negotiated, does not vary with the actual cost but may be adjusted as a result of any subsequent changes in the scope of work or services to be performed under the contract. (DGS, APSPM)

Contract, Cost-Plus-A-Percentage-Of-Cost—A form of contract which provides for a fee or profit at a specified percentage of the contractor's actual cost of accomplishing the work. Except in case of emergency affecting the public health, safety or welfare and for some insurance contracts, no public contract shall be awarded on the basis of cost plus a percentage of cost (Code of Virginia, § 2.2-4331). (DGS, APSPM)

Contract Administration—The process of managing the contract and the relationship between the buyer and seller, reviewing and documenting how a seller is performing or has performed to

establish required corrective actions and provide a basis for future relationships with the seller, managing contract related changes and, when appropriate, managing the contractual relationship with the outside buyer of the project. (PMBOK 3RD EDITION)

Contract Closure—The process of completing and settling the contract, including resolution of any open items and closing each contract. (PMBOK 3RD EDITION)

Control—Comparing actual performance with planned performance, analyzing variances, assessing trends to effect process improvements, evaluating possible alternatives, and recommending appropriate corrective action as needed. (PMBOK 3RD EDITION)

Control Charts—A graphic display of process data over time and against established control limits, and that has a centerline that assists in detecting a trend of plotted values toward either control limits. (PMBOK 3RD EDITION)

Control Item—A project element that is considered a unit for the purpose of change and configuration management. This includes such items as software modules, versions of software systems, the project design document, the project plans, and so forth.

Control System—A mechanism that reacts to the current project status in order to ensure accomplishment of project objectives.

Core Processes—Processes that have clear dependencies and that require the same order on most projects.

Corrective Action—Documented direction for executing the project work to bring expected future performance of the project work in line with the project management plan. (PMBOK 3RD EDITION)

Cost Avoidance—An action taken in the present design to decrease costs in the future.

Cost Benefit Analysis (CBA)—An evaluation of the costs and benefits of alternative approaches to a proposed activity to determine the best alternative. (CCA)

Cost Budgeting—The process of aggregating the estimated costs of individual activities or work packages to establish a cost baseline. (PMBOK 3RD EDITION)

Cost Control—The process of influencing the factors that create variances, and controlling changes to the project budget. (PMBOK 3RD EDITION)

Cost-Effectiveness Analysis (CEA)—A systematic quantitative method for comparing the costs of alternative means of achieving the same stream of benefits or a given objective. (CCA)

Cost Estimating—The process of developing an approximation of the cost of the resources needed to complete project activities. (PMBOK 3RD EDITION)

Cost of Quality—Determining the costs incurred to ensure quality. (PMBOK 3RD EDITION)

Cost Performance Index (CPI)—A measure of cost efficiency on a project. It is the ratio of earned value (EV) to actual costs (AC). CPI = EV divided by AC. A value equal to or greater than one indicates a favorable condition and a value less than one indicates an unfavorable condition. (PMBOK 3RD EDITION)

Cost Reimbursable Contracts—This category of contract involves payment (reimbursement) to the contractor for its actual costs. Costs are usually classified as direct costs (costs incurred directly by the project, such as wages for members of the project team) and indirect costs (costs allocated to the project by the performing organization as a cost of doing business, such as salaries for corporate executives). Indirect costs are usually calculated as a percentage of direct costs. Cost reimbursable contracts often include incentives for meeting or exceeding selected project objectives such as schedule targets or total cost. (SOM)

Cost/Schedule Impact Analysis (CSIA)—The process followed to determine the cost and/or schedule impact of a specific change with a project.

Cost Variance (CV)—A measure of cost performance on a project. It is the algebraic difference between earned value (EV) and actual cost (AC). CV=EV minus AC. A positive value indicates a favorable condition and a negative value indicates an unfavorable condition. (PMBOK 3RD EDITION)

Critical Activity—Any schedule activity on a critical path in a project schedule. Most commonly determined by using the critical path method. Although some activities are "critical" in the dictionary sense, without being on the critical path, this meaning is seldom used in the project context. (PMBOK 3RD EDITION)

Critical Path—Generally, but not always, the sequence of schedule activities that determines the duration of the project. Generally, it is the longest path through the project. However, a critical path can end, as an example, on a schedule milestone that is in the middle of the project schedule and that has a finish-no-later-than imposed date schedule constraint. (PMBOK 3RD EDITION)

Critical Path Method (CPM)—A schedule network analysis technique used to determine the amount of scheduling flexibility (the amount of float) on various logical network paths in the project schedule network, and to determine the minimum total project duration. Early start and finish dates are calculated by means of a forward pass using a specified start date. Late start and finish dates are calculated by means of a backward pass, starting from a specified completion date, which sometimes is the project early finish date determined during the forward pass calculation. (PMBOK 3RD EDITION)

Critical Success Factors—The limited number of areas of performance that are essential for a project to achieve its goals and objectives. They are the key areas of activity in which favorable results are absolutely necessary to reach goals. Critical success factors are often referred to as "CSF". (SEI)

Current Finish Date—The current estimate of the point in time when a schedule activity will be completed, where the estimate reflects any reported work progress. (PMBOK 3RD EDITION)

Current Start Date—The current estimate of the point in time when a schedule activity will begin, where the estimate reflects any reported work progress. (PMBOK 3RD EDITION)

Customer—The person or organization that will use the project's product or service or results. (PMBOK 3rd Edition)

D

Data Date—The date up to or through which the project's reporting system has provided actual status and accomplishments. (PMBOK 3RD EDITION)

Decision Criteria—A documented set of factors that are used to examine and compare the costs, risks, and benefits of various IT projects and systems. These decision criteria consist of (1) screening criteria, which are used to identify whether new projects meet initial acceptance requirements and ensure that the project is reviewed at the most appropriate organizational level, and (2) criteria for assessing and ranking all projects. These ranking criteria weigh and compare the relative costs, risks, and benefits of each project against all other projects. (GAO)

Decision Tree Analysis—The decision tree is a diagram that describes a decision under

consideration and shows the implications of choosing one or another of the available alternatives. This analysis incorporates probabilities and the costs of each logical path of events. (SOM)

Decomposing (Decomposition)—The process of breaking down activities and the work package to a manageable level.

Deflection—The act of transferring all or part of a risk to another party, usually by some form of contract.

Deliverable—Any unique and verifiable product, result or capability to perform a service that must be produced to complete a process, phase, or project. Often used more narrowly in reference to an external deliverable, which is a deliverable that is subject to approval by the project sponsor or customer. (PMBOK 3RD EDITION)

Delphi Technique—An information gathering technique used as a way to reach a consensus of experts on a subject. Experts on the subject participate in this technique anonymously. A facilitator uses a questionnaire to solicit ideas about the important project points related to the subject. The responses are summarized and are then re-circulated to the experts for further comment. Consensus may be reached in a few rounds of this process. The Delphi technique helps reduce bias in the data and keeps any one person from having undue influence on the outcome. (PMBOK 3RD EDITION)

Design Documents—Technical documents that lay out in detail the anticipated design of the project deliverable.

Detailed Project Planning—Activities required to complete a detailed project plan for project execution and control as specified in the Commonwealth Project Management Standard and Guideline.

Development—The actual work performed to accomplish, effect, or bring about the Information Technology Project.

Development Approval—Approval by the ITIB to proceed with detailed project planning, project execution and control, project closeout, and asset operation and management.

Discount Factor—The factor that translates expected benefits or costs in any given future year into present value terms. The discount factor is equal to 1/ (1 + i) t where i is the interest rate and t is the number of years from the date of initiation for the program or policy until the given future year. (CCA)

Discount Rate—The interest rate used in calculating the present value of expected yearly benefits and costs. (CCA)

Discrete Activity—A task that has a deliverable, is measurable, and has a definite start and finish. An item on the Work Breakdown Structure would be an example of a discrete activity.

Dummy Activity—A schedule activity of zero duration used to show a logical relationship in the arrow diagramming method. Dummy activities are used when logical relationships cannot be completely or correctly described with regular activity arrows. Dummy activities are generally shown graphically as a dashed line headed by an arrow. (PMBOK 3RD EDITION)

Duration—The total number of work periods (not including holidays or other non-working periods) required to complete a schedule activity or work breakdown structure components. Usually expressed as workdays or workweeks. Sometimes incorrectly equated with elapsed time. Contrast with effort. (PMBOK 3RD EDITION)

E

Early Finish Date (EF)—In the critical path method, the earliest possible point in time on which the uncompleted portions of a schedule activity (or the project) can finish, based on the schedule network logic, the data date, and any schedule constraints. Early finish dates can change as the project progresses and as changes are made to the project management plan. (PMBOK 3RD EDITION)

Early Start Date—In the critical path method, the earliest possible point in time on which the uncompleted portions of a schedule activity (or the project) can start, based on the schedule network

logic, the data date and any schedule constraints. Early start dates can change as the project progresses and changes are made to the project management plan. (PMBOK 3RD EDITION)

Earned Value (EV)—The value of completed work expressed in terms of the approved budget assigned to that work for a schedule activity or work breakdown structure component. (PMBOK 3RD EDITION)

Effort—The number of labor units required to complete a schedule activity or work breakdown structure component. Usually expressed as staff hours, staff days, or staff weeks. Should not be confused with duration.

Enterprise—An organization with common or unifying business interests. An enterprise may be defined at the Commonwealth level, the Secretariat level, or agency level for programs and projects requiring either vertical or horizontal integration within the Commonwealth, a Secretariat, or agency, or between multiple Secretariats, agencies and/or localities.

Enterprise Architecture (EA)—A method or framework for developing, implementing, and revising business-focused Information Technology (IT) guidance. The resulting guidance describes how the enterprise can best use technology and proven practices to improve the way it does business. In the Commonwealth, EA is built on the business needs of state and local government agencies. EA is described in a series of documents that showcase the development and revision process, the involved parties, and the resulting guidance. The Commonwealth EA relies on a governance model (roles and responsibilities), business and technical inputs, and knowledge of how agencies presently do business to develop explicit policies, standards, and guidelines for information technology use.

Enterprise Technology Program—A group of related IT projects aggregated for management purposes that support a defined enterprise.

Enterprise Program Management (EPM)—An Information Technology Investment Management-based methodology to manage programs and projects of enterprise significance. EPM focuses on the management of multiple related programs and projects that individually support the same mission or ongoing activity.

Enterprise Technology Program—A group of related IT projects, aggregated for management purposes that support a defined enterprise.

Estimate—A quantitative assessment of the likely amount or outcome. Usually applied to project costs, resources, effort, and duration and is usually preceded by a modifier (i.e.,) preliminary, conceptual, feasibility, order of-magnitude, definitive). It should always include some indication of accuracy (e.g. + percent). (PMBOK 3RD EDITION)

Estimate at Completion (EAC)—The expected total cost of a schedule activity, a work breakdown structure component, or the project when the defined scope of work will be completed. EAC is equal to the actual cost (AC) plus the estimate to complete (ETC) for all of the remaining work. EAC=AC plus ETC. The EAC may be calculated based on performance to date or

estimated by the project team based on other factors, in which case it is often referred to as the latest revised estimate. (PMBOK 3RD EDITION)

Estimate to Complete (ETC)—The expected cost needed to complete all the remaining work for a schedule activity, work breakdown structure component, or the project. (PMBOK 3RD EDITION)

Ethics—In the conduct of their operations, state organizations and their employees will employ information technology in a legal and ethical manner consistent with government statutes, rules, and regulations. Information technology will not be used for purposes that are unrelated to the state organization's mission or violates state or federal law. Contract provisions, including software licensing agreements, will be strictly enforced.

Exception Report—Document that includes only major variations from the plan. (PMBOK 3RD EDITION)

Expected Monetary Value Analysis—A statistical technique that calculates the average outcome when the future includes scenarios that may or may not happen. A common use of this technique is within decision tree analysis. Modeling and simulation are recommended for cost and schedule risk analysis because it is more powerful and less subject to misapplication than expected monetary value analysis. (PMBOK 3RD EDITION)

F

Facilitating Processes—Interactions among processes that are more dependent on the nature of the project

Fast Tracking—A specific project schedule compression technique that changes network logic to overlap phases that would normally be done in sequence, such as the design phase and construction phase, or to perform schedule activities in parallel. (PMBOK 3RD EDITION)

Feasibility Study—A formal document that analyzes and discusses a possible solution to a technical or business issue and determines if the solution is practical, reasonable and doable.

Financial Audit—A thorough examination of a project by an evaluation team that includes a detailed overview of the project's financial procedures, budgets, records, etc. It may deal with a project as a whole or the separate individual parts of a project

Financial Closure—The process of completing and terminating the financial and budgetary aspects of the project being performed. It includes both (external) contract closure and (internal) project account closure.

Fixed Price or Lump Sum Contracts—This category of contract involves a fixed total price for a well-defined product. Fixed price contracts may also include incentives for meeting or exceeding selected project objectives such as schedule targets.

Float—The amount of time that a schedule activity can be delayed without delaying the early start of any immediately following schedule activities. Also called slack, total float, and path float. (PMBOK 3RD EDITION)

Forward Pass—The calculation of the early start and early finish dates for the uncompleted portions of all network activities. (PMBOK 3RD EDITION)

Four-Year Investment Cost—The planned project and ongoing support costs for the current and following budget biennium in which the project is authorized.

Free Float (FF)—The amount of time a schedule activity can be delayed without delaying the early start of any immediately following schedule activities. (PMBOK 3RD EDITION)

Functional Manager—Someone with management authority over an organizational unit within a functional organization. The manager of any group that actually makes a product or performs a service. (PMBOK 3RD EDITION)

Functional Organization—A hierarchical organization where each employee has one clear superior, staff are grouped by areas of specialization, and managed by a person with expertise in that area. (PMBOK 3RD EDITION)

Function Point—Unit of measure to quantify the overall size and complexity of a computer application.

Functional Requirements—What the systems/products are, do, or provide from the customer's point of view.

G

Gantt Chart—See bar chart. (PMBOK 3RD EDITION)

Goods—Material, equipment, supplies, printing, and automated data processing hardware and software (Code of Virginia, § 2.2-4301).

Governance—The development and management of consistent, cohesive policies, processes, and decision-rights for a given area of responsibility.

Grade—A category or rank used to distinguish items that have the same functional use (e.g., "hammer") but do not share the same requirements for quality (e.g., different hammers may need to withstand different amounts of force.) (PMBOK 3RD EDITION)

Grant—Funds given to Commonwealth agencies by foundations, businesses, governments, or individuals.

Grant Notification—An entry in an agency IT Strategic Plan indicating that the agency has applied for a grant.

Graphical Evaluation and Review Technique (GERT)—A network analysis technique that allows for conditional and probabilistic treatment of logical relationships (i.e., some activities may not be performed.)

Guidelines—Are directives and specifications, similar to standards, but advisory in nature. In essence, guidelines constitute recommendations which are not binding on agencies and institutions of higher education. (COV ITRM STANDARD GOV2000-01.1)

H

Hammock—An aggregate or summary activity (a group of related activities is shown as one and reported at a summary level). A hammock may or may not have an internal sequence.

Hanger—An unintended break in a network path. Missing activities or missing logical relationships usually causes hangers.

High-end Server—Defined as servers with a greater than 16-processor scale-up limit and typically costing more than $250,000.

I

Identified for Preliminary Planning (IPP)—A project portfolio category for projects that address an agency business need, but which require additional effort by the agency or further review by the CIO and ITIB before the expenditure of funds will be authorized.

Impact—The loss or effect on the project, program, or enterprise if the risk occurs. Impact is one of the three attributes of a risk. (SEI)

Impact Statement—A cause and effect report generated at the manager level to show the impact that new projects will have on current schedules and resources as they enter the work stream.

Implementation—Occurs when products that have completed testing are moved into production or into their working environment. Normally used as a term on Information Technology projects.

Improve the Business—A project portfolio category for projects that support business functionality, deliverables, or processes by enhancing existing assets. These projects can introduce new processes.

Independent Project Oversight—A process that employs a variety of quality control, inspection, test measurement, and other observation processes to ensure that project objectives are achieved in accordance with an approved plan. Project oversight is usually done by an independent entity

(separate from the project team) trained or experienced in a variety of management and technical review methods. Project oversight includes both technical and management oversight.

Independent Verification and Validation (IV&V)—A review (or audit) that is performed by an organization that is technically, managerially, and financially independent of the development organization. A quality assurance process carried out by an independent third party.

Inflation—The proportionate rate of change in the general price level, as opposed to the proportionate increase in a specific price. Inflation is usually measured by a broad-based price index, such as the implicit deflator for Gross Domestic Product or the Consumer Price Index. (CCA)

Information System—The organized collection, processing, transmission, and dissemination of information in accordance with defined procedures, whether automated or manual. Information systems include non-financial, financial, and mixed systems. (GAO)

Information Technology (IT)—The hardware and software operated by an organization to support the flow or processing of information in support of business activities, regardless of the technology involved, whether computers, telecommunications, or other. In the Commonwealth of Virginia, Information Technology means telecommunications, automated data processing, databases, the Internet, management information systems, and related information, equipment, goods, and services.

Information Technology Infrastructure Library (ITIL)—A publication developed by the Central Computer and Telecommunications Agency (CCTA) of the Office of Government Commerce (OGC) of the United Kingdom which documents best practices and a comprehensive process model for IT service management.

Information Technology Investment Management (ITIM)—A management process that provides for the identification (pre-selection), selection, control, and evaluation of (business driven) IT investments across the investment lifecycle. ITIM uses structured processes to minimize risks and maximize return on investments. ITIM is the basis for the Commonwealth's approach to technology management as approved by the ITIB in the Commonwealth Technology Management Policy.

Initial Risk Identification—The process during the initial concept phase of identifying risks that might impact a project. The risk identification process is recommended for agencies to evaluate a project.

Initiating Processes—Those processes performed to authorize and define the scope of a new phase or project or that can result in the continuation of halted project work. (PMBOK 3RD EDITION)

Intangible Benefits—Benefits that are difficult to measure and quantify. Intangible benefits include such things as customer retention, employee retention, and improved customer service.

Intangible Costs—Costs that are difficult to measure and quantify. Intangible costs include such things as lost performance and efficiency while the users are getting acquainted with the new system.

Investment Business Case—A justification for a potential IT project used to determine investment priority.

Invitation for Bids (IFB)—A document, containing or incorporating by reference the specifications or scope of work and all contractual terms and conditions, that is used to solicit written bids for a specific requirement for goods or nonprofessional services. This type of solicitation is also referred to as an Invitation to Bid. (DGS, APSPM)

IT Asset—Technology component of a business-driven process used to support the flow or processing of information (i.e. automated applications, information technology facilities, data, digital and paper records, IT infrastructure, IT human resources, etc.)

IT Investment Management—An integrated approach to managing IT investments that provides for the continuous identification, selection, control, life-cycle management and evaluation of IT investments. A structured process to provide a systematic method to minimize risks and maximize return on IT investments. (Meta Group)

IT Portfolio Management—A management process used to identify (pre-select), select, control, and evaluate investments within and across asset and project portfolios. The primary focus of IT portfolio management is to ensure alignment between business goals and IT investments.

IT Strategic Plan—A document which aligns IT strategy and investments with organizational business priorities, goals, and objectives.

IT Strategic Planning (ITSP)—An ITIM-based planning methodology that looks at IT resources and projects as capital investments and forms a foundation for the selection, control and evaluation of IT resources and projects as part of a business-driven technology portfolio.

L

Lag—A modification of a logical relationship that directs a delay in the successor activity. For example, in a finish-to-start dependency with a 10-day lag, the successor activity cannot start until ten days after the predecessor activity has finished. (PMBOK 3RD EDITION)

Late Finish Date (LF)—In the critical path method, the latest possible point in time that a schedule activity may be completed based upon the schedule network logic, the project completion date, and any constraints assigned to the schedule activities without violating a schedule constraint or delaying the project completion date. The late finish dates are determined during the backward pass calculation of the project schedule network. (PMBOK 3RD EDITION)

Late Start Date (LS)—In the critical path method, the latest possible point in time that a schedule activity may begin based upon the schedule network logic, the project completion date, and any

constraints assigned to the schedule activities without violating a schedule constraint or delaying the project completion date. The late start dates are determined during the backward pass calculation of the project schedule network. (PMBOK 3RD EDITION)

Lead—A modification of a logical relationship that allows an acceleration of the successor activity. For example, in a finish-to-start dependency with a ten-day lead, the successor activity can start ten days before the predecessor has finished. (PMBOK 3RD EDITION)

Lessons Learned—The learning gained from the process of performing the project. Lessons learned may be identified at any point. Also considered a project record, to be included in the lessons learned knowledge base. (PMBOK 3RD EDITION)

Leadership—The way in which the project manager influences the project team to behave in a manner that will facilitate project goal achievement.

Level of Effort (LOE)—Support-type activity (e.g., seller or customer liaison, project cost accounting, project management, etc.) that does not readily lend itself to measurement of discrete accomplishment. It is generally characterized by a uniform rate of work performance over a period of time determined by the activities supported. (PMBOK 3RD EDITION)

Life-Cycle Cost—The overall estimated cost for a particular object over the time corresponding to the life of the object, including direct and indirect initial costs plus any periodic or continuing costs for operation and maintenance. (GAO)

Line Manager—(1) The manager of any group that actually makes a product or performs a service. (2) A functional manager.

Logical Relationship—A dependency between two project schedule activities, or between a project schedule activity and a schedule milestone. The four possible types of logical relationships are: Finish-to-start, Finish-to-finish, Start-to-start, and Start-to-finish. (PMBOK 3RD EDITION)

M

Major IT Project—In the Commonwealth of Virginia, Major IT Projects means any state agency information technology project that (i) is mission critical, (ii) has statewide application, or (iii) has a total estimated cost of more than $1 million.

Mandatory Projects—Projects that support legal or regulatory requirements such as Executive orders, state legislation, or Federal mandates.

Master Schedule—A summary-level project schedule that identifies the major deliverables and work breakdown structure components and key schedule milestones. (PMBOK 3RD EDITION)

Matrix Organization—Any organizational structure in which the project manager shares responsibility with the functional managers for assigning priorities and for directing the work of persons assigned to the project. (PMBOK 3RD EDITION)

Methodology—The processes, policies, and guidelines that are included as part of the framework for project management.

Midrange to Small Server—Servers costing $50, 000 or less are typical midrange- to small-servers. These servers would usually have one to four processors, but could have as many as 8 or 16 processors. When the midrange computer is a scaled-down version of a high-end server, it may cost substantially more.

Milestone—A significant point or event in the project. (PMBOK 3RD EDITION)

Milestone Schedule—A summary-level schedule that identifies the major schedule milestones. (PMBOK 3RD EDITION)

Mission Statement—A concise statement, usually one paragraph, summarizing the purpose and goals of a project.

Mitigate—Dealing with a risk by developing strategies and actions for reducing (or eliminating) the impact, probability, or both, of the risk to some acceptable level. It may also involve shifting the timeframe when action must be taken. (SEI)

Mitigation—Taking steps to lessen risk by lowering the probability of a risk event's occurrence or reducing its effect, should it occur.

Mitigation Approach—The approach taken to deal with a risk. This can be to accept, research, watch, or mitigate.

Mitigation Plan—An action plan for risks that are to be mitigated. It documents the strategies, actions, goals, schedule dates, tracking requirements, and all other supporting information needed to carry out the mitigation strategy.

Monitor—Collect project performance data with respect to a plan, produce performance measures, and report and disseminate performance information. (PMBOK 3RD EDITION)

Model—A representation of a set of components of a process, system, or subject area. A model is generally developed for understanding, analysis, improvement, and/or replacement of the process. (GAO)

Monte Carlo Analysis—A technique that computes, or iterates, the project cost or project schedule many times using input values selected at random from probability distributions of possible costs or durations, to calculate a distribution of possible total project cost or completion dates. (PMBOK 3RD EDITION)

N

Near Critical Activity—A schedule activity that has low total float. (PMBOK 3RD EDITION)

Net Present Value—The difference between the discounted present value of benefits and the discounted present value of costs. This is also referred to as the discounted net. (CCA)

Node—One of the defining points of a schedule network; a junction point joined to some or all of the other dependency lines. See also arrow diagramming method and precedence diagramming method. (PMBOK 3RD EDITION)

Non-major IT Project—In the Commonwealth of Virginia, Non-major IT Projects are those technology projects with an estimated total project cost of less than $1 million and not deemed to be mission critical or designated as having statewide application by the Chief Information Officer.

O

Ongoing Support Cost—The periodic and continuing cost to operate and maintain the product or service delivered by the project.

Operational Project—Project which modifies or enhance an existing process.

Order of Magnitude—An estimate made without detailed data usually produced from cost data. This type of estimate is used during the formative stages of an expenditure program for initial evaluation of the project.

Organizational Breakdown Structure (OBS)—A hierarchically organized depiction of the project organization arranged so as to relate the work packages to the performing organizational units. (PMBOK 3RD EDITION)

Organizational Planning—Identifying, documenting, and assigning project roles, responsibilities, and reporting relationships.

Outcome—The ultimate, long-term, resulting effect--both expected and unexpected--of the customer's use or application of the organization's outputs. (GAO)

Overall Change Control—Coordinating changes across the entire project.

Oversight—Management by overseeing the performance or operation of a person or group.

Oversight Committee—A body chartered by the Chief Information Officer, a Cabinet Secretary, or an Agency Head to review and make recommendations regarding Major IT projects within that Secretariat or Agency.

P

Parametric Estimating—An estimating technique that uses a statistical relationship between historical data and other variables (e.g., square footage in construction, lines of code in software development) to calculate an estimate for activity parameters, such as scope, cost, budget, and duration. This technique can produce higher levels of accuracy depending upon the sophistication and the underlying data built into the model. (PMBOK 3RD EDITION)

Pareto Chart—A histogram, ordered by frequency of occurrence, that shows how many results were generated by each identified cause. (PMBOK 3RD EDITION)

Path—A set of sequentially connected activities in a project network diagram.

Path Convergence—The merging or joining of parallel schedule network paths into the same node in a project schedule network diagram. Path convergence is characterized by a schedule activity with more than one successor activity. (PMBOK 3RD EDITION)

Path Divergence—Extending or generating parallel schedule network paths from the same node in a project schedule network diagram. Path divergence is characterized by a schedule activity with more than one successor activity. (PMBOK 3RD EDITION)

Payback Period—The number of years it takes for the cumulative dollar value of the benefits to exceed the cumulative costs of a project. (CCA)

Percent Complete (PC)—An estimate, expressed as a percent, of the amount of work that has been completed, on an activity or a work breakdown structure component. (PMBOK 3RD EDITION)

Performance Gap—The gap between what customers and stakeholders expect and what each process and related sub processes produces in terms of quality, quantity, time, and cost of services and products. (GAO)

Performance Measurement—The process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals and using such indicators to assess progress in achieving these goals. (GAO)

Performance Reporting—The process of collecting and distributing performance information. This includes status reporting, progress measurement, and forecasting. (PMBOK 3RD EDITION)

Performing Organization—The enterprise whose personnel are most directly involved in doing the work of the project. (PMBOK 3RD EDITION)

PERT Chart—A specific type of project network diagram. See Program Evaluation and Review Technique.

Personal Computing—Devices and device components for desktop computers, notebooks and handheld computers including operating systems, hardware components, productivity software, and security software.

Plan—An intended future course of action.

Planning Approval—Approval granted by the CIO to proceed with project planning for the project. Specifically, identification of solutions and development of the business case that supports project development approval.

Planned Value—The authorized budget assigned to the scheduled work to be accomplished for a schedule activity or work breakdown structure component. (PMBOK 3RD EDITION)

Platform Architecture—Defines the personal and business computing hardware systems to be used by agencies. The platforms may include servers (e.g., high-end servers and midrange to small servers), storage systems, personal computing devices (desktops, notebooks, and hand-held computing devices), and other hardware (e.g., printers). In addition to platform hardware, the Platform Architecture addresses operating systems, configurations, network and device-to-device interfaces, and selected peripherals (e.g., floppy drives). In the instance of personal computing devices, the architecture also addresses base productivity software, security software, and utilities that are necessary to make the hardware useful to users. The architecture addresses decision criteria and best practices for the acquisition and deployment of platforms. The architecture also identifies management and remote access components, which are critical to platform use. Details regarding management components are addressed in the Systems Management Domain.

Platforms—Personal computing devices, servers, and/or storage systems.

Policy—Are general statements of direction and purpose designed to promote the coordinated planning, practical acquisition, effective development, and efficient use of information technology resources. (COV ITRM STANDARD GOV2000-01.1)

Portfolio—A collection of projects or programs and other work that are grouped together to facilitate effective management of that work to meet strategic business objectives. The projects or programs of the portfolio may not necessarily be interdependent or directly related. (PMBOK 3RD EDITION)

Portfolio Management—The centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work, to achieve specific strategic business objectives. (PMBOK 3RD EDITION)

Post Implementation Report—Documents the successes and failures of a project and suggest follow up actions. It provides a historical record of the planned and actual budget and schedule. Other selected metrics on the project can also be collected, based upon state organization procedures. The report also contains recommendations for other projects of similar size and scope.

Post-implementation Review (PIR)—An evaluation tool that compares the conditions before the implementation of a project (as identified in the business case) with the actual results achieved by the project. (GAO)

Precedence Diagramming Method (PDM)—A schedule network diagramming technique in which schedule activities are represented by boxes (or nodes). Schedule activities are graphically linked by one or more logical relationships to show the sequence in which the activities are to be performed. (PMBOK 3RD EDITION)

Precedence Relationship—The term used in the precedence diagramming method for a logical relationship. In current usage, however, precedence relationship, logical relationship, and dependency are widely used interchangeably regardless of the diagramming method used. (PMBOK 3RD EDITION)

Predecessor Activity—The schedule activity that determines when the logical successor activity can begin or end. (PMBOK 3RD EDITION)

Priority—The imposed sequences desired with respect to the scheduling of activities within previously imposed constraints.

Probability—The likelihood the risk will occur. Probability is one of the three attributes of risk. (SEI)

Procedure—A collection of steps that the organization is responsible for implementing to ensure that policies and process requirements are met. The agency may use guidelines to develop these procedures.

Procurement—The procedures for obtaining goods or services, including all activities from the planning steps and preparation and processing of a requisition, through receipt and acceptance of delivery and processing of a final invoice for payment. (DGS)

Procurement Cost—The total estimated cost of the goods or services being purchased.

Product—General terms used to define the result of a project delivered to a customer.

Product Description Statement—A non-formal, high-level document that describes the characteristics of the product/process to be created.

Productivity Software—Software typically used by business professionals such as word processing, spreadsheets, presentation slides, web browsers, and plug ins. Also includes lesser-used software such as personal database software, flowcharting, project management.

Program—A group of related projects managed in a coordinated way to obtain benefits and control not available from managing them individually. Programs may include elements of related work outside of the scope of the discrete projects in the program. (PMBOK 3RD EDITION)

Program Manager—A centralized coordinated management of a program to achieve the program's strategic objectives and benefits. (PMBOK 3RD EDITION)

Progress Analysis—The evaluation of progress against the approved schedule and the determination of its impact. For cost, this is the development of performance indices.

Program Evaluation and Review Technique (PERT)—An event-oriented network analysis technique used to estimate project duration when there is a high degree of uncertainty with the individual activity duration estimates. PERT applies the critical path method to a weighted average duration estimate

Project—A temporary endeavor undertaken to create a unique product, service or result. (PMBOK 3RD EDITION)

Project Administration—Making Project Plan modifications; may result from such things as: new estimates of work still to be done, changes in scope/functionality of end-product(s), resource changes, and unforeseen circumstances. It includes monitoring the various Execution Phase activities, monitoring risks, status reporting, and reviewing/authorizing project changes as needed.

Project Business Objective—A desired result produced by a project that answers or resolves a business problem.

Project Category—The grouping of Commonwealth IT projects into three categories:

1. Non-major IT Projects that have a total estimated cost less than $100,000;
2. Non-major IT Projects that have a total estimated cost equal to or greater than $100,000 and less than or equal to $1 million; and
3. Major IT Projects that are either mission critical, or have statewide application, or have a total estimated cost of more than $1 million.

Project Charter—A document issued by the project initiator or sponsor that formally authorizes the existence of a project, and provides the project manager with the authority to apply organizational resources to project activities. (PMBOK 3RD EDITION)

Project Communications Management—Includes the processes required to ensure timely and appropriate generation, collection, distribution, storage, retrieval, and ultimate disposition of project information. (PMBOK 3RD EDITION)

Project Concept Document (PCD)—The document that is the foundation for making a decision to initiate a project. It describes the project purpose and presents a preliminary business case for pursuing the project. It gives decision makers the opportunity to determine project viability.

Project Cost—The total cost to provide the business driven, technology-based product or service. The costs include the hardware, software, services, installation, management, maintenance, support, training, and internal staffing costs planned for the project. Internal staffing costs are the apportioned salaries and benefits of the project team members.

Project Cost Management—Includes the processes involved in planning, estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. (PMBOK 3RD EDITION)

Project Description—An initial, high-level statement describing the purpose, benefits, customer(s), general approach to development and characteristics of a product or service required by the organization.

Project Duration—The elapsed time from project start date through to project finish date.

Project Human Resource Management—Includes the processes that organize and manage the project team. (PMBOK 3RD EDITION)

Project Initiation—The conceptual development phase of a project. A process that leads to approval of the project concept and authorization (through a charter) to begin detailed planning. In the Commonwealth of Virginia Project Initiation is also referred to as "Project Planning" or "planning for the project" not to be confused with the Detailed Project Planning.

Project Integration Management—Includes the process and activities needed to identify, define, combine, unify and coordinate the various processes and project management activities within the Project Management Process Groups. (PMBOK 3RD EDITION)

Project Management (PM)—The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. (PMBOK 3RD EDITION)

Project Manager—The person assigned by the performing organization to achieve the project objectives. (PMBOK 3RD EDITION)

Project Measures of Success—The measurable, business-oriented indicators that will be used to assess progress made in achieving planned project objectives.

Project Oversight—A process that employs a variety of quality control, inspection, test measurement, and other observation processes to ensure that planned project objectives are achieved in accordance with an approved plan. Project oversight includes both technical and management oversight. Project oversight is usually done by an independent entity (separate from the project team) trained or experienced in a variety of management and technical review methods.

Project Phase—A collection of logically related project activities, usually culminating in the completion of a major deliverable. (PMBOK 3RD EDITION)

Project Plan—A formal, approved document used to guide both project execution and project control. The primary uses of the Project Plan are to document planning assumptions, decisions and project baselines; facilitate communication among stakeholders; and, essentially describe how the project will be executed and controlled.

Project Planning—Activities to conduct effective initial analysis of business needs and potentially useful technologies required for development of a detailed business case, incorporating a comprehensive definition of scope and supported by sound financial and cost based analysis.

Project Portfolio Category—The grouping of Commonwealth IT projects into a number of broad categories based on the products or end results being produced by the projects. An item may be placed in more than one category.

Project Procurement Management—Includes the processes to purchase or acquire the products, services, or results needed from outside the project team to perform the work. (PMBOK 3RD EDITION)

Project Quality Management—Includes the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken. (PMBOK 3RD EDITION)

Project Risk Management—Includes the processes concerned with conducting risk management planning, identification, analysis, responses, and monitoring and control on a project. (PMBOK 3RD EDITION)

Project Schedule—The planned dates for performing schedule activities and the planned dates for meeting schedule milestones. (PMBOK 3RD EDITION)

Project Scope—The work that must be performed to deliver a product, service, or result with the specified features and functions. (PMBOK 3RD EDITION)

Project Scope Management—Includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. (PMBOK 3RD EDITION)

Project Sponsor—An individual, usually part of the organization management team, who makes the business case for the project. This individual usually has the authority to define project goals, secure resources, and resolve organizational and priority conflicts.

Project Team Members—The individuals that report either part time or full time to the project manager and are responsible for the completion of project tasks.

Project Time Management—Includes the processes required to accomplish timely completion of the project. (PMBOK 3RD EDITION)

Project Transition Checklist—A document that ensures that the activities of the Planning Phase have been finished, reviewed, and signed off so that the project may move from the Planning Phase into the Execution Phase.

Projectized Organization—Any organizational structure in which the project manager has full authority to assign priorities, apply resources, and to direct the work of persons assigned to the project. (PMBOK 3RD EDITION)

Proprietary Specification—A specification that restricts the acceptable product(s) or service(s) to that of one or more manufacturer(s) or vendor(s). A common example would be the use of a "brand name" specification that would exclude consideration of proposed "equals." Although all sole source specifications are proprietary, all proprietary specifications are not sole source. Proprietary items may be available from several distributors through competitive bidding.

Public Broadcasting Services—Public telecommunications are non-commercial educational or cultural radio and television programs and related instructional or informational material that may be transmitted by means of electronic communications (see also "Telecommunications Services").

Q

Quality—A composite of attributes (including performance features and characteristics) of the product, process, or service required to satisfy the need for which the project is undertaken.

Quality Assurance (QA)—(1) The process of evaluating overall project performance on a regular basis to provide confidence that the project will satisfy the relevant quality standards. (2) The organizational unit that is assigned responsibility for quality assurance.

Quality Control (QC)—(1) The process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance. (2) The organizational unit that is assigned responsibility for quality control.

Quality Management—A collection of quality policies, plans, procedures, specifications, and requirements is attained through quality assurance (managerial) and quality control (technical).

Quality Planning—The process of identifying which quality standards are relevant to the project and determining how to satisfy them. (PMBOK 3RD EDITION) The process of monitoring specific project results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

R

Remaining Duration (RD)—The time in calendar units, between the data date of the project schedule and the finish date of a schedule activity that has an actual start date. This represents the time needed to complete a schedule activity where the work is in progress. (PMBOK 3RD EDITION)

Requirement(s)—A statement or set of statements that define what the user(s) of a product want that product to do. Generally, it defines what capabilities a product needs to have, based on the needs of the users.

Requirements Document—A formal document that consists of a statement or set of statements that define product functions and capabilities as set by the end user.

Request for Information (RFI)—An informal document issued when an agency is not aware of the products available in the market which may satisfy its requirements. The use of an RFI does not require a purchase requisition, however a RFI may result in the development of a requisition, or the issuance of an IFB or RFP after an agency determines the types of products that are available which will satisfy its requirements. An RFI cannot be made into an agreement. (DGS - APSPM)

Request for Proposals (RFP)—All documents, whether attached or incorporated by reference, utilized for soliciting proposals; the RFP procedure requires negotiation with offerors (to include prices) as distinguished from competitive bidding when using an Invitation for Bids. (DGS - APSPM)

Reserve—A provision in the project management plan to mitigate cost and/or schedule risk. Often used with a modifier (e.g., management reserve, contingency reserve) to provide further detail on what types of risk are meant to be mitigated. The specific meaning of the modified term varies by application area.

Resource—Skilled human resources (specific disciplines either individually or in crews or teams), equipment, services, supplies, commodities, material, budgets, or funds. (PMBOK 3rd Edition)

Resource Leveling—Any form of schedule network analysis in which scheduling decisions (start and finish dates) are driven by resource constraints (e.g., limited resource availability or difficult-to-manage changes in resource availability levels.) (PMBOK 3RD EDITION)

Resource-Limited Schedule—A project schedule whose schedule activity, scheduled start dates and scheduled finish dates reflect expected resource availability. (PMBOK 3RD EDITION)

Resource Loading Profiles—Detailed staffing plan including number of personnel by type over time.

Responsibility Assignment Matrix (RAM)—A structure that relates the project organizational breakdown structure to the work breakdown structure to help ensure that each component of the project's scope of work is assigned to a responsible person. (PMBOK 3RD EDITION)

Retainage—A portion of a contract payment that is withheld until contract completion to ensure full performance of the contract terms. (PMBOK 3RD EDITION)

Return on Investment (ROI)—A figure of merit used to help make capital investment decisions. ROI is calculated by considering the annual benefit divided by the investment amount. (GAO)

Risk—An uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives. (PMBOK 3RD EDITION)

Risk Acceptance—A risk response planning technique that indicates that the project team has decided not to change the project management plan to deal with a risk, or is unable to identify any other suitable response strategy. (PMBOK 3RD EDITION)

Risk Analysis—A technique to identify and assess factors that may jeopardize the success of a project or achieving a goal. The technique also helps define preventive measures to reduce the probability of these factors from occurring and identify countermeasures to successfully deal with these constraints when they develop. (GAO)

Risk Avoidance—A risk response planning technique for a threat that creates changes to the project management plan that are meant to either eliminate the risk or to protect the project objectives from its impact.(PMBOK 3RD EDITION)

Risk Assessment—Review, examination, and judgment of whether or not the identified risks are acceptable. Initial risk assessment is used as a tool to determine project oversight requirements.

Risk Control—Involves executing the Risk Management Plan in order to respond to risk events over the course of the project.

Risk Event—A discrete occurrence that may adversely or favorably affect the project.

Risk Identification—The process of determining which risks might affect the project and documenting their characteristics. (PMBOK 3RD EDITION)

Risk Management—The process of identifying, analyzing, and responding to risk factors throughout the life of a project and in the best interests of its objectives. The art and science of identifying, analyzing, and responding to risk factors throughout the life of a project and in the best interests of its objectives.

Risk Management Plan—The document describing how project risk management will be structured and performed on the project. (PMBOK 3RD EDITION)

Risk Mitigation—A risk response planning technique associated with threats that seeks to reduce the probability of occurrence or impact of a risk to below an acceptable threshold. (PMBOK 3RD EDITION)

Risk Statement (also known as Statement of Risk)—A description of the current conditions that may lead to a loss or a description of the loss or consequence. (SEI)

Run the Business—A project portfolio category for projects that support business functionality, deliverables, or processes by correcting or modifying existing assets. These projects do not introduce new functionality.

S

S-Curve—Graphic display of cumulative costs, labor hours, or other quantities, plotted against time. The name derives from the S-like shape of the curve (flatter at the beginning and end, steeper in the middle) produced on a project that starts slowly, accelerates, and then tails off.

Schedule Development—The process of analyzing schedule activity sequences, schedule activity durations, resource requirements, and schedule constraints to create the project schedule. (PMBOK 3RD EDITION)

Schedule Performance Index (SPI)—The measure of schedule efficiency on a project. IT is the ratio of earned value (EV) to planned value (PV). The SPI = EV divided by PV. An SPI equal to or greater than one indicates a favorable condition and a value of less than one indicates an unfavorable condition. (PMBOK 3RD EDITION)

Schedule Variance (SV)—A measure of schedule performance on a project. It is the algebraic difference between the earned value (EV) and the planned value (PV). SV = EV minus PV.(PMBOK 3RD EDITION)

Scope—The sum of the products, services, and results to be provided as a project. (PMBOK 3RD EDITION)

Scope Change—Any change to the project scope. A scope change almost always requires an adjustment to the project cost or schedule. (PMBOK 3RD EDITION)

Scope Creep—Adding features and functionality (project scope) without addressing the effects on time, costs, and resources, or without customer approval. (PMBOK 3RD EDITION)

Scope Definition—The process of developing a detailed project scope statement as the basis for future project decisions. (PMBOK 3RD EDITION)

Scope Planning—The process of creating a project scope management plan. (PMBOK 3RD EDITION)

Scope Statement—A document capturing the sum of products and services to be provided as a project. The Scope Statement is part of the Project Plan.

Scope Verification—The process of formalizing acceptance of the completed project deliverables. (PMBOK 3RD EDITION)

Server—A computer that provides some service for other computers connected to it via a network.

Services—Any activities performed by an independent contractor wherein the service rendered does not consist primarily of acquisition of equipment or materials, or the rental of equipment, materials and supplies (Code of Virginia, § 2.2-4301).

Slack—Term used in PERT or arrow diagramming method for float. (PMBOK 3RD EDITION)

Slippage—The tendency of a project to exceed original estimates of budget and time.

Software—A general term that refers to all programs or instructions that are used to operate computer hardware. Software causes computer hardware to perform activities by telling a computer how to execute functions and tasks.

Sole Source—A product or service which is practicably available only from one source. (DGS – APSPM)

Specification Documents—Documents that provide specific information about the project deliverable characteristics.

Stakeholder—Persons and organizations such as customers, sponsors, performing organization and the public, that are actively involved in the project, or whose interests may be positively or negatively affected by execution or completion of the project. (PMBOK 3RD EDITION)

Standards—Are specific and, where applicable, technical documents containing directives and mandatory specifications governing the management, development, and use of information technology resources. (COV ITRM STANDARD GOV2000-01.1)

State agency or agency—Any agency, institution, board, bureau, commission, council, or instrumentality of state government in the executive branch listed in the appropriation act.

Statement of Work (SOW)—A narrative description of products, services or results to be supplied. (PMBOK 3RD EDITION)

Status Reports—A report containing information on a specific project, indicating if the project is ahead of schedule, on schedule, or behind schedule in relation to the project plan.

Storage—Computer storage is the holding of data in an electromagnetic form for access by a computer processor. Primary storage is data in random access memory (RAM) and other "built-in" devices. Secondary storage is data on hard disks, tapes, and other external devices.

Strategic Business Plan—A plan developed by an agency that sets clearly defined objectives, strategies, and actions for achieving agency and Commonwealth long term goals and initiatives.

Successor Activity—The schedule activity that follows a predecessor activity, as determined by their logical relationship. (PMBOK 3RD EDITION)

T

Tangible Benefits—Benefits that can be measured and quantified. Tangible benefits include savings that result from improved performance and efficiency.

Tangible Costs—Costs that can be measured and quantified. Tangible costs include costs for hardware, software, people, and supplies for both the development process and ongoing operations.

Task—Well defined components of project work. Often a task is referred as a work package.

Transformational Projects—Projects that change the way an organization does business.

Technology Infrastructure—Means telecommunications, automated data processing, word processing and management information systems, and related information, equipment, goods and services.

Technology Investments—Assets such as business-driven applications, data, facilities, IT human resources, infrastructure, services, operations and processes used to support the flow or processing of information for business activities.

Technology Portfolio—A management tool comprised of essential information about technology investments, structured to facilitate the evaluation of investment alternatives in support of an agency's overall strategic business plan.

Technical Specifications—Specifications that establish the material and performance requirements of goods and services.

Telecommunications—Any origination, transmission, emission, or reception of signals, writings, images, and sounds or intelligence of any nature, by wire, radio, television, optical or other electromagnetic systems.

Telecommunications Equipment—Defined as, but not limited to: channel service units, data compression units, line drivers, bridges, routers, and Asynchronous Transfer Mode switches (ATM), multiplexers and modems. Also, private branch exchanges (PBX), Integrated Services Digital Network (ISDN) terminal equipment, voice mail units, automatic call distribution (ACD), voice processing units and key systems. Video communications products such as: coders, multi-point conferencing units and inverse multiplexers.

Telecommunications Facilities—An apparatus necessary or useful in the production, distribution, or interconnection of electronic communications for state agencies or institutions including the buildings and structures necessary to house such apparatus and the necessary land.

Telecommunications Services—These services include, but are not limited to; data communication services, such as point-to-point and multipoint circuits, Internet, Frame Relay SMDS, ATM, and dial up lines, and voice communications services such as Centrex, business/private lines and WATS lines including 800 services, tie and access lines, long distance services, voice mail, pay phones, wireless communications and cellular services (see also "Public Telecommunications Services").

Template—A partially complete document in a predefined format that provides a defined structure for collecting, organizing and presenting information and data. Templates are often based upon

documents created during prior projects. Templates can reduce the effort needed to perform work and increase the consistency of results. (PMBOK 3RD EDITION)

Testing—The actual test of the products or processes created within the development phase of an Information Technology project.

Timeframe—The period when action is required to mitigate the risk. Timeframe is one of the three attributes of risk. (SEI)

Total Cost—The sum of all cost (fixed and variable) for a particular item or activity over a specified period.

Total Cost of Ownership (TCO)—A calculation of the fully burdened cost of owning a component. The calculation helps consumers and enterprise managers assess both direct and indirect costs and benefits related to the purchase of IT components. For the business purchase of a computer, the fully burdened costs can also include such things as service and support, networking, security, user training, and software licensing.

Transform the Business—A project portfolio category for projects that support business functionality, deliverables, or processes by changing the way an organization does business.

Triggers—Indications that a risk has occurred or is about to occur. Triggers may be discovered in the risk identification process and watched in the risk monitoring and control process. (PMBOK 3RD EDITION)

Triple Constraint—A framework for evaluating competing demands. The triple constraint is often depicted as a triangle where one of the sides or one of the corners represents one of the parameters being managed by the project team. (PMBOK 3RD EDITION)

U

Unit Price Contracts—The contractor is paid a preset amount per unit of service (e.g., $70 per hour for professional services or $1.08 per cubic yard of earth removed) and the total value of the contract is a function of the quantities needed to complete the work.

V

Validation—The technique of evaluating a component or product during or at the end of a phase or project to ensure it complies with the specified requirements. Contrast with verification. (PMBOK 3RD EDITION)

Variance—A quantifiable deviation, departure, or divergence away from a known baseline or expected value. (PMBOK 3RD EDITION)

Verification—The technique of evaluating a component or product at the end of a phase or project to assure or confirm it satisfies the conditions imposed. Contrast with validation. (PMBOK 3RD EDITION)

W

Work Breakdown Structure (WBS)—A deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and create the required deliverables. It organizes and defines the total scope of the project. Each descending level represents an increasingly detailed definition of the project work. The WBS is decomposed into work packages. The deliverable orientation of the hierarchy includes both internal and external deliverables. (PMBOK 3RD EDITION)

Work Package—A deliverable or project work component at the lowest level of each branch of the work breakdown structure. The work package includes the schedule activities and schedule milestones required to complete the work package deliverable or project work component. (PMBOK 3RD EDITION)

Workaround—A response to a negative risk that has occurred. Distinguished from contingency plan in that a workaround is not planned in advance of the occurrence of the risk event. (PMBOK 3RD EDITION)